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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/687,963	10/20/2003	Nobuyuki Asakura	Q78072	8958
23373	7590	12/16/2004	EXAMINER	
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			MAYO III, WILLIAM H	
			ART UNIT	PAPER NUMBER
			2831	

DATE MAILED: 12/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/687,963

Applicant(s)

ASAKURA ET AL.

Examiner

William H. Mayo III

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 11 is/are rejected.
- 7) ☒ Claim(s) 10 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 July 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 07/23/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Priority***

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in present Application No. 10/687,963, filed on October 20, 2003.

### ***Information Disclosure Statement***

2. The information disclosure statement filed July 23, 2004 has been submitted for consideration by the Office. It has been placed in the application file and the information referred to therein has been considered.

### ***Drawings***

3. Figures 11-15 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.121(d)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

4. Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following:

- (1) if a machine or apparatus, its organization and operation;
- (2) if an article, its method of making;
- (3) if a chemical compound, its identity and use;
- (4) if a mixture, its ingredients;
- (5) if a process, the steps.

Extensive mechanical and design details of apparatus should not be given.

5. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

6. The abstract of the disclosure is objected to because in lines 1-2 and 13-14, the abstract contains the language "the invention is characterized" and "According to the structure", which is improper language for the abstract. The applicant should delete the lines to provide proper language in the abstract.

7. In lines 15-17, the abstract refers to purported merits or speculative applications of the invention, which is improper content for the abstract. The applicant should delete the lines to provide proper content in the abstract. Correction is required. See MPEP § 608.01(b).

***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1-3 & 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Ide et al (Pat Num 5,922,993, herein referred to as Ide). Ide discloses a water cutoff structure (Figs 1-7) of a covered wire capable of securing a sealing condition and providing an excellent melting operation efficiency (Col 2, lines 43-46). With respect to claim 1, Ide discloses a water cutoff structure (Fig 5) of covered wire (W1) in which first member (35) and second member (33) having first and second water cutoff portions (33a & 35a) made of resin (Col 8, lines 37-41) respectively are attached on the covered wire (W1) by ultrasonic welding (Col 9, lines 33-38) to thereby provide water cutoff (Col

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8, lines 20-25), wherein a first member (35) has first locking portions (41) and the second member (33) has a second locking portions (43), wherein the first and second locking portions (41 & 43, respectively) are fitted to each other (Col 8, lines 63-67).

With respect to claim 2, Ide discloses that the first locking portion (41) are formed to be along the first water cutoff portion (35a) so as to extend substantially orthogonal to the mating surface of the first member (35). With respect to claim 3, Ide discloses that the first and second locking portions (41 & 43, respectively) are a projected portion and recessed portion respectively, which are fitted to each other (Col 8, lines 63-67). With respect to claim 5, Ide discloses that the recessed portion (43) includes a groove portion (inside of groove portion is curved to fit projection) having a narrower width than the recessed portion (43) formed at the bottom portion of the recessed portion (43, Fig 5).

10. Claims 6-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Ide et al (Pat Num 6,327,777, herein referred to as Ide2). Ide2 discloses a water cutoff structure (Figs 1-2b) of a covered wire capable of defining a flow of the molten resin during ultrasonic welding, whereby the electrical connecting performance can be stabilized (Col 2, lines 1-8). Specifically, with respect to claim 6, Ide discloses a water cut off structure (S1) comprising a plurality of core lines (1 & 2) covered by a resin cover (1d & 2b) in which a first member (13) and a second member (14) are made of resin (Col 4, lines 40-44) and attached on the covered wire (1 & 2) by ultrasonic welding (Col 5, lines 1-11) to thereby provide water cutoff, wherein each of the first and second members (13 & 14) has a laterally width wider than a width when the core lines (1 & 2) are laterally arrayed (Fig 2b) and molten resin (5) is filled among the core lines (1 & 2) by applying

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ultrasonic welding in a state that a pressure is applied from outer sides of the covered wires (1 & 2, Col 5, lines 1-9). With respect to claim 7, Ide2 discloses that the first member (13) includes a recess (13c) for receiving a melted substance of the resin cover (14) on a mating surface (butt faces) of the first member (13) to the second member (14) and at least a partition wall (13b) dividing the recess (13c) in a longitudinal direction on the covered wire (1 & 2) and sandwiching the core lines (1 & 2) that are exposed when the resin cover (1d & 2b) is removed (Col 5, lines 32-45). With respect to claim 8, Ide2 discloses that a projected rib (not numbered, see Fig 2b) extended in a direction intersecting with the longitudinal direction of the covered wire (1 & 2) is provided at the face of the partition wall (13b) in contact with the covered wire (1 & 2) wherein the projection (not numbered) is formed on the matching surface (butt surfaces) around the recess (13c) which abut a mating surface of the second member (14).

### ***Claim Rejections - 35 USC § 103***

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

13. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ide et al (Pat Num 5,922,993, herein referred to as Ide). Ide discloses a water cutoff structure (Figs 1-7) of a covered wire capable of securing a sealing condition and providing an excellent melting operation efficiency (Col 2, lines 43-46) as disclosed above with respect to claim 1. Specifically, with respect to claim 4, Ide discloses that the first locking portions (41) is provided with a first positioning projection portion (at 41) and the second locking portion (43) are provided with a second positioning receiving portion (at 43) which is fitted to the first positioning projected portion (at 41).

However, Ide doesn't necessarily disclose the first locking portions having first receiving portion nor the second locking portions having second projection portions, wherein the first receiving portion is fitted to the second projection portion (claim 4).

With respect to claim 4, it would have been obvious to one having ordinary skill in the art of water cutoff structures, at the time the invention was made to modify the first and second locking portions of Ide to comprise a mixture of recess and projection portions respectively as opposed to all the projection portions being on the first locking portion and all of the recess portion being on the second locking portion, since it has been held that rearranging parts of an invention involves only routine skill in the art. *In*



*re Japikse, 86 USPQ 70* and it appears that Ide would perform equally well with the modification.

14. Claims 9 & 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over by Ide et al (Pat Num 6,327,777, herein referred to as Ide2). Ide2 discloses a water cutoff structure (Figs 1-2b) of a covered wire capable of defining a flow of the molten resin during ultrasonic welding, whereby the electrical connecting performance can be stabilized (Col 2, lines 1-8) as disclosed above with respect to claim 8 above.

Specifically, with respect to claim 9, Ide2 discloses that a projected rib (not numbered, see Fig 2b) is extended over a width of the first member (13) and an auxiliary projected rib (13a) is provided in parallel with the projected rib (13b). With respect to claim 11, Ide2 discloses that a plurality of stages of the partition walls (at 13a & 13b) are provided at intervals there among dividing the recess (13c) in two longitudinal directions of the covered wire (1 & 2).

However, Ide2 doesn't specifically disclose the projection rib extending over the entire width of the first member (claim 9), nor the recesses being three or more (claim 11).

With respect to claim 9, it would have been obvious to one having ordinary skill in the art of cables at the time the invention was made to modify the projection rib of Ide2 to comprise longer extension such that the projection rib extends over the entire width of the first member since it has been held that a change in form cannot sustain patentability where involved is only extended application of obvious attributes from a prior art. *In re Span-Deck Inc. vs. Fab-Con Inc. (CA 8, 1982) 215 USPQ 835.*

With respect to claim 11, it would have been obvious to one having ordinary skill in the art, at the time the invention was made to modify the recesses of Ide2 to comprise at least three or more, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. (*St. Regis Paper Co v. Bemis Co.*, 193 USPQ 8).

### ***Allowable Subject Matter***

15. Claim 10 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

16. The following is a statement of reasons for the indication of allowable subject matter: This invention deals with a water cutoff structure comprising a peripheral edge rib over the entire periphery of a periphery edge of the matching face of a first member (claim 10). The above stated claim limitations, in combination with base claim limitations, is not taught or suggested by the prior art of record.

### ***Conclusion***

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. They are Shinchu et al (Pat Num 6,313,407), Kato et al (Pat Num 6,004,170), Ide et al (Pat Num 5,925,202), Kato et al (Pat Num 6,027,589), Shinchu (Pat Num 6,027,009), Ide et al (Pat Num 5,959,252), Ide et al (Pat Num 5,929,384), Ito et al


(Pat Num 5,997,340), and Shinchi (Pat Num 5,869,784), all of which disclose water cutoff structures for cables.

### ***Communication***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William H. Mayo III whose telephone number is (571)-272-1978. The examiner can normally be reached on M-F 8:30am-6:00 pm (alternate Fridays off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on (571) 272-2800 ext 31. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
William H. Mayo III  
Primary Examiner  
Art Unit 2831

WHM III